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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/970,626	10/04/2001	Steven P. Schwinke	GP-301613	1389

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EXAMINER

PEREZ, JULIO R

ART UNIT	PAPER NUMBER
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2681

DATE MAILED: 08/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/970,626

Applicant(s)

SCHWINKE, STEVEN P.

Examiner

Julio R. Perez

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 May 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 11, 12 and 26 is/are allowed.
- 6) ☒ Claim(s) 1-10, 13-18, 20-23, 25, 27-28 is/are rejected.
- 7) ☒ Claim(s) 19 and 24 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 5/23/05 have been fully considered but they are not persuasive.

Further, the applicant argues that Takayama does not teach selecting a second channel of the carrier in response to the blocked signal, based on the signal strength, and requesting service access on the second control channel of the carrier.

However, the examiner respectfully disagrees. The cell sites are responsive to a report signal for assigning priorities to other cells in accordance to the channel occupancy, thereafter selecting one other channel according to the status of the channel of being busy or idle. A busy signal is sent to the mobile if a busy signal is detected and an attempt to find an idle channel is performed. Further evidence of these limitations is shown in column 6, lines 3-17; Figs. 3,6, (see also column 5, lines 60-67). When a request for communication is rejected (blocked connection) by a cell site, a selection for a different available channel is produced according to the priority that provides the availability of the communication channels after an encounter of a busy signal.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 4-5, 13-14, 20-22, 25, 27-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takayama (5442807) in view of Haarstsen et al. (5839075).

Regarding claim 1, Takayama discloses a method of bypassing a blocked voice channel of a mobile phone system comprising: initiating a call request from a mobile phone (col. 1, lines 13-17; col. 3, lines 63-68; col. 4, lines 1-3, the mobile station request communication); scanning a plurality of control channels of a carrier (col. 1, lines 13-17; col. 4, lines 11-14, the mobile station performs channel scanning across the control channel bands); measuring a signal strength of each control channel (col. 1, lines 13-17; col. 4, lines 20-30; col. 8, lines 9-14, signal strength is measured on the control channels); requesting service access on a first control channel of the carrier based on the signal strength (col. 1, lines 19-22 and 62-68; col. 3, lines 63-68; col. 4, line 1; col. 6, lines 3-17, a connection request of an idle channel with highest signal strength is requested).

Takayama discloses the system wherein each cell site station includes a plurality of voice channels and several control-channel transmitters or control channels except for explicitly allocating a cellular channel while receiving a busy signal as indication of no speech-channel available on the first set of scanned control channels, and therefore choosing a second set of control channels after scanning the new set of channel associated with their respective signal strengths, and hence accessing the available control channel on the system., as recited on the claims. See column 3, lines 46-50; col. 6, lines 3-17, for the suggestion of indication of a busy signal on a control channel further sending a busy signal status on a control channel for indication of busy control

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channel while scanning the control channel on the surrounding cell site stations as recited on col. 4, lines 10-60; col. 6, lines 3-17.

Haarstsen discloses the system for allocating a cellular channel while receiving a busy signal as indication of no speech-channel available on the first set of scanned control channels, and therefore choosing a second set of control channels after scanning the new set of channel associated with their respective signal strengths, and hence accessing the available control channel on the system (col. 17, lines 1-51).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the communication system as taught by Haarstsen by implementing the system with mechanisms to perform scanning when detecting busy signal on control channel and requesting access to a second control channel in order provide effective reuse configuration between the base stations within the cell sites, and effective and secure connection between the mobile stations and base stations, and therefore avoiding the number of blocked phone signals and, in this manner, improving the call capacity within the cellular system.

Regarding claim 4, Takayama discloses the method further comprising: receiving a blocked signal indicating no availability of a voice channel on the second control channel of the carrier (col. 4, lines 10-14 and 45-68; col. 5, lines 1-4; Fig. 3 and 6, the mobile station is notified if a control channel is busy or available when requested); selecting a next strongest control channel of the carrier in response to the blocked signal based on the signal strength (col. 4, lines 10-14 and 45-68; col. 5, lines 1-4; Fig. 3 and 6, the mobile searches the next highest signal on the priority table to try to camp

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in); and requesting service access on the next strongest control channel of the carrier (col. 4, lines 10-14 and 45-68; col. 5, lines 1-4; Fig. 3 and 6, therefore, requesting service).

Regarding claim 5, Takayama discloses the method wherein the voice channel uses a service selected from a group consisting of voice telephony, short messaging, paging, voice mail, electronic mail, call forwarding, caller identification, call waiting, conference calling, broadcast messages, voice band data, facsimile data, data transmission, modem access, direct access to computer networks, registration, authentication and access to emergency services (It is inherent as evidenced by the fact that one of ordinary skill in the art would have recognized that in any cellular or mobile systems is conventional for mobile stations to transmit information to base stations via the identified radio control channel, information communicated by the mobile and for the registration process include the Mobile Identification Number (MIN) and the Electronic Serial Number (ESN) of the mobile. This indeed comprises registration process. In terms of GSM, for instance, it is inherent for GSM systems to provide voice mail, short message service and facsimile service).

Regarding claim 13, Takayama discloses a computer usable medium including a program for bypassing a blocked voice channel of a mobile phone system, comprising (col. 5, lines 20-59, the system presented needs a program that can execute specified functions or steps in order to follow series of instructions); computer program code for initiating a call request from a mobile phone (col. 1, lines 13-17; col. 3, lines 63-68; col. 4, lines 1-3, the mobile station request communication); computer program code for

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scanning a plurality of control channels of a carrier (col. 1, lines 13-17; col. 4, lines 11-14, the mobile station performs channel scanning across the control channel bands); computer program code for measuring a signal strength of each control channel (col. 5, lines 8-11; col. 8, lines 9-14, signal strength is measured on each channel); requesting service access on a first control channel of the carrier based on the signal strength (col. 1, lines 19-22 and 62-68; col. 3, lines 63-68; col. 4, line 1, a connection request of an idle channel with highest signal strength is requested).

Takayama discloses wherein each cell site station includes a plurality of voice channels and several control-channel transmitters or control channels except for explicitly allocating a cellular channel while receiving a busy signal as indication of no speech-channel available on the first set of scanned control channels, and therefore choosing a second set of control channels after scanning the new set of channel associated with their respective signal strengths, and hence accessing the available control channel on the system, as recited on the claims. See column 3, lines 46-50, for the suggestion of indication of a busy signal on a control channel further sending a busy signal status on a control channel for indication of busy control channel while scanning the control channel on the surrounding cell site stations as recited on col. 4, lines 10-60; col. 6, lines 3-17.

Haarstsen discloses for allocating a cellular channel while receiving a busy signal as indication of no speech-channel available on the first set of scanned control channels, and therefore choosing a second set of control channels after scanning the

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new set of channel associated with their respective signal strengths, and hence accessing the available control channel on the system (col. 17, lines 1-51).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the communication system as taught by Haarstsen by implementing the system with mechanisms to perform scanning when detecting busy signal on control channel and requesting access to a second control channel in order provide effective reuse configuration between the base stations within the cell sites, and effective and secure connection between the mobile stations and base stations, and therefore avoiding the number of blocked phone signals and, in this manner, improving the call capacity within the cellular system.

Regarding claim 14, Takayama discloses the computer usable medium (col. 5, lines 20-59, the system presented needs a program that can execute specified functions or steps in order to follow series of instructions), further comprising: computer program code for receiving a blocked signal indicating no availability of a voice channel on the second control channel of the carrier (col. 4, lines 10-14 and 45-68; col. 5, lines 1-4; col. 6, lines 3-17; Fig. 3, 6, the mobile station is notified if a control channel is busy or available when requested); computer program code for selecting a next strongest control channel of the carrier in response to the blocked signal based on the signal strength (col. 4, lines 10-14 and 45-68; col. 5, lines 1-4, 60-67; col. 6, lines 3-17; Fig. 3 and 6, the mobile searches the next highest signal on the priority table to try to camp in); and computer program code for requesting service access on the next strongest

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control channel of the carrier (col. 4, lines 10-14 and 45-68; col. 5, lines 1-4; Fig. 3 and 6, requesting service).

Regarding claim 20, Takayama discloses a blocked voice channel bypassing system comprising: means for initiating a call request from a mobile phone (col. 1, lines 13-17; col. 3, lines 63-68; col. 4, lines 1-3, the mobile station request communication); means for scanning a plurality of control channels of a carrier (col. 1, lines 13-17; col. 4, lines 11-14, the mobile station performs channel scanning across the control channel bands); means for measuring a signal strength of each control channel (col. 5, lines 8-11; col. 8, lines 9-14, signal strength is measured on each channel); means for requesting service access on a control channel of the carrier based on the signal strength (col. 1, lines 13-17; col. 4, lines 20-30; col. 8, lines 9-14, signal strength is measured on the control channels).

Takayama discloses wherein each cell site station includes a plurality of voice channels and several control-channel transmitters or control channels except for explicit means for allocating a cellular channel while receiving a busy signal as indication of no speech-channel available on the first set of scanned control channels, and therefore choosing a second set of control channels after scanning the new set of channel associated with their respective signal strengths, and hence accessing the available control channel on the system, as recited on the claims. See column 3, lines 46-50, for the suggestion of indication of a busy signal on a control channel further sending a busy signal status on a control channel for indication of busy control channel

while scanning the control channel on the surrounding cell site stations as recited on col. 4, lines 10-60.

Haarstsen discloses means for allocating a cellular channel while receiving a busy signal as indication of no speech-channel available on the first set of scanned control channels, and therefore choosing a second set of control channels after scanning the new set of channel associated with their respective signal strengths, and hence accessing the available control channel on the system (col. 17, lines 1-51).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the communication system as taught by Haarstsen by implementing the system with mechanisms to perform scanning when detecting busy signal on control channel and requesting access to a second control channel in order provide effective reuse configuration between the base stations within the cell sites, and effective and secure connection between the mobile stations and base stations, and therefore avoiding the number of blocked phone signals and, in this manner, improving the call capacity within the cellular system.

Regarding claim 21, Takayama discloses the system further comprising: means for receiving a blocked signal indicating no availability of a voice channel on the second control channel of the carrier (col. 4, lines 10-14 and 45-68; col. 5, lines 1-4; Fig. 3 and 6, the mobile station is notified if a control channel is busy or available when requested); means for selecting a next strongest control channel of the carrier in response to the blocked signal based on the signal strength (col. 4, lines 10-14 and 45-68; col. 5, lines 1-4; Fig. 3 and 6, the mobile searches the next highest signal on the

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priority table to try to camp in); and means for requesting service access on the next strongest control channel of the carrier (col. 4, lines 10-14 and 45-68; col. 5, lines 1-4; Fig. 3 and 6, requesting service).

Regarding claim 22, Takayama discloses the system wherein the means for initiating a call request from a mobile phone includes an analog cellular phone system operating within a prescribed band between nominally 824.04 MHz and 893.97 MHz (col. 5, lines 33-42, AMPS consists of a total of 832 channels and occupies the band (MHz): 824 – 849 in the reverse band and 869 – 894 in the forward band).

Regarding claim 25, Takayama discloses the method, wherein the carrier is a home carrier (col. 4, lines 45-60, the controls channels are searched in the home cell site).

Regarding claim 27, Takayama discloses the computer reusable medium, wherein the carrier is a home carrier (col. 4, lines 45-60, the controls channels are searched in the home cell site).

Regarding claim 28, Takayama discloses the method, wherein the carrier is a home carrier (col. 4, lines 45-60, the controls channels are searched in the home cell site).

4. Claims 2-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takayama (5442807) in view of Dent (6553229).

Regarding claim 2, Takayama discloses the limitations in claim 1.

Takayama does not explicitly disclose wherein the mobile phone system is an analog cellular phone system.

However, However, the preceding limitation is well known in the art of telecommunications.

Dent discloses cellular radiotelephones, which are widely used in wireless communications (col. 5, lines 33-42, radiotelephones that include AMPS, an analog cellular system).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the system as taught by Takayama with a system that includes analog because it would provide the system with more capability to encompass a wide variety of radiotelephone uses.

Regarding claim 3, the combination of Takayama and Dent discloses the method wherein the analog cellular-phone system operates within a prescribed band between nominally 824.04 MHz and 893.97 MHz (col. 5, 33-42, AMPS inherently consists of a total of 832 channels and occupies the band (MHz): 824 – 849 on the reverse band and 869 – 894 on the forward band).

5. Claims 6-7, 15, 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takayama (5442807) in view of Raith et al. (6073005).

Regarding claims 6, 15, 23, Takayama discloses all limitations in claims 1, 13, 20.

Takayama does not explicitly disclose increasing priority for emergency services.

However, the preceding limitation is known in the art of mobile communications.

Raith et al. teach a mobile providing input for indication of an emergency call to be placed so that it can be categorized as emergency (col. 3, lines 65-67; col. 4, lines 1-3, 24-29; col. 5, lines 6-17).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to improve upon the mobile communication system as taught by Takayama by implementing the mobile terminal with means to acquire possible emergency call numbers as taught by Raith et al. in order to increase the capabilities for emergency services.

Regarding claim 7, Raith et al. teach priority for emergency services by reducing wait time during the call request (col. 6, lines 64-67; col. 7, lines 1-10, a mobile, after the user has requested an emergency call, that takes a few seconds to set up the call to assign and connect to the system via a traffic channel).

6. Claims 8-10 and 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takayama (5442807) and Raith et al. (6073005) in view of Dutta et al. (US20020137489).

Regarding claims 8,16, Takayama discloses the limitations in claims 1 and 13.

Takayama does not explicitly disclose the call request is automatically initiated in response to an emergency.

However, the preceding limitation is known in the art of mobile communications.

Raith et al. teach the mobile unit wherein a determination is taken after the user has provided input indicating an emergency call to be placed and be categorized as an

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emergency wherein appropriate action is to be taken (col. 3, lines 65-67; col. 4, lines 1-3).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to improve upon the mobile communication system as taught by Takayama by implementing the mobile terminal with capabilities to respond to an emergency call in conjunction with mechanisms to provide geographical position of emergency calls as taught by Raith et al. in order to respond to such emergencies.

Regarding claims 9 and 17, Takayama and Raith et al. teach all limitations in claims 1 and 16.

Takayama and Raith et al. do not explicitly disclose the emergency indicated by the deployment of an air on a mobile vehicle carrying the mobile phone.

However, the preceding limitation is known in the art of mobile communications.

Dutta et al. teach a wireless phone equipped with an emergency notification system installed in a vehicle, which in an event of an emergency, the notification will be activated by the deployment of an air bag (Par. 0009; Par. 0040).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to improve upon the signal scanning system as taught by Takayama and Raith et al. by implementing the system with telecommunications circuitry operable to communicate on a wireless carrier system as taught by Dutta et al. because it would provide the system with capabilities to notify an emergency during an air bag deployment.

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Regarding claims 10 and 18, Raith et al. disclose the call request includes a geographical location of a mobile vehicle (col. 3, lines 65-67; col. 4, lines 1-3, includes mechanism for pinpointing position of an emergency caller).

Allowable Subject Matter

7. Claims 11, 12, 26 are allowed.

Prior art has not been found that suggests or renders obvious the limitation of independent claim 11 disclosing selecting a control channel on the carrier when the vehicle is within a predetermined speed range.

8. Claims 19 and 24 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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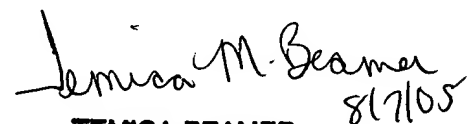
the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julio R. Perez whose telephone number is (571) 272-7846. The examiner can normally be reached on 7:00 - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph H. Feild can be reached on (571) 272- 4090. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


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